



# Blue Grass: A Partnership for Safe Chemical Weapons Destruction

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The Blue Grass Army Depot, located near Richmond, Ky., safeguards a ready supply of conventional munitions and provides chemical defense equipment and special operations support to the U.S. Department of Defense. The Blue Grass Chemical Activity, a tenant of the 15,000-acre depot, is responsible for the safekeeping of a portion of the nation's chemical weapons stockpile. Together the Army and the community surrounding the depot are working toward a committed partnership to support the safe destruction of the Blue Grass chemical weapons stockpile.

### What are the chemical weapons?

The chemical weapons stockpile is comprised of 523 tons of blister agent in projectiles and nerve agent in projectiles and rockets. Contrary to popular belief, these chemicals are not gases. In their original form, they are actually liquids. When stored for a long period of time, they can become thick and sludge-like.

### What is the Blue Grass Chemical Agent-Destruction Pilot Plant?

The plant will be a state-of-the-art, full-scale pilot facility designed to safely and efficiently neutralize the Blue Grass chemical weapons stockpile. In June 2003, a systems contract was awarded to Bechtel Parsons Blue Grass to design, build, construct, test, operate and ultimately close this facility.

### How will the weapons be destroyed?

After a comprehensive evaluation process, the Department of Defense selected neutralization followed by supercritical water oxidation, or SCWO, as the method of destruction on Feb. 3, 2003. During the neutralization process, munitions are disassembled using modified reverse assembly. After the agent and energetics are separated, they are chemically decomposed and neutralized by caustic or water hydrolysis. The resulting chemical compounds are known as "hydrolysates." The agent hydrolysate and the energetics hydrolysate are destroyed using SCWO units. The SCWO process subjects the hydrolysates to very high temperature and pressure, breaking them down into carbon dioxide, water, and salts. Metal parts are thermally decontaminated in a heated discharge conveyor. Dunnage, or materials such as the wooden pallets upon which the weapons are stored, are destroyed in the SCWO process. Solid effluents are recycled or tested prior to disposal in permitted landfills. Gas effluents are recycled or filtered and monitored before release to the atmosphere.

### Who will destroy the weapons?

The destruction facility will be operated by the systems contractor, Bechtel Parsons Blue Grass. The Assembled Chemical Weapons Alternatives program, known as ACWA and headquartered at Aberdeen Proving Ground, Md., has been charged with

responsibility for safely disposing of the Blue Grass stockpile. Many other organizations are working in partnership with ACWA to complete this mission successfully. Among these organizations are the Chemical Materials Agency, Joint Munitions Command, Kentucky Department for Environmental Protection and Kentucky Division of Emergency Management.

### **How long will it take to destroy the weapons?**

Bechtel Parsons Blue Grass is in the process of completing of the design. Once this phase is complete, a schedule will be developed. Subsequent phases will include construction, systemization, pilot testing, operations and ultimately, closure. The goal is to complete operations by the current Chemical Weapons Convention, or treaty, deadline, which is April 2012.

### **How will the environment be protected?**

Protection of the unique environment surrounding the Blue Grass Army Depot is one of the Army's top considerations. Therefore, the permits for the facility will be based on special environmental studies conducted locally. Additionally, during disposal activities, the environment will be monitored continually to ensure that operations are protective of the area

### **What will happen to the facility and the depot once the weapons are gone?**

The areas of the facility that have come in contact with chemical agent will be decontaminated and the equipment dismantled. The disposition of the remainder of the facility has not yet been determined and will be negotiated among the Commonwealth of Kentucky, ACWA and Blue Grass Army Depot.

### **What is the Kentucky Environmental Working Integrated Process Team?**

The WIPT was chartered by the Department of Defense to expedite the planning, development and implementation of all aspects of the environmental permitting process for a chemical weapons disposal facility at the Blue Grass Army Depot. The Blue Grass WIPT meetings are held approximately every other month in Lexington or Richmond and are open to the public. Meetings are advertised in the Richmond Register, Berea Citizen and other local newspapers.

### **What is the Kentucky Chemical Demilitarization Citizens' Advisory Commission?**

This commission, known as the CAC, is made up of nine members appointed by the governor of Kentucky. Seven are local citizens and two are representatives of state agencies that work closely with the chemical weapons disposal program. The purpose of this organization is to provide a link between the community and the Army. The members provide a local perspective to the Army so that the public is as actively involved as possible in the disposal program.

Local citizens may request to receive meeting notices and minutes by mail or email. For information on the current issues the commission is considering, to find out the upcoming meeting schedule, or to be added to the mailing list please contact the CAC secretary at 859-625-1528 or fax at 859-625-1502.

### **What is the Chemical Destruction Community Advisory Board?**

The Chemical Destruction Community Advisory Board, or CDCAB, is comprised of representatives of the community, board members and their respective organizations who have been selected to provide advice on major policy issues regarding all aspects of the Blue Grass Chemical Agent-Destruction Pilot Plant.

Board member representatives were selected throughout a series of community forums and meetings earlier this year. The continuation of community interest and participation will be a key factor in the successful launch of this board.

In its mission statement, board members have identified the following primary activities:

- Promoting the safe, expeditious destruction of the weapons
- Ensuring the protection of the community and facility workers
- Encouraging sustainable economic development of the community
- Articulating community priorities regarding the facility
- Guiding public outreach and information sharing with the community.

### **How can I learn more?**

The Army opened the Blue Grass Chemical Stockpile Outreach Office in 1996 as a "one-stop" source of information about the chemical disposal program. The office staff works closely with the Army public affairs team, the state regulatory offices and local and state emergency preparedness offices to ensure a comprehensive public involvement and outreach program. The office also regularly schedules speaking presentations for community groups and serves as a resource for locating Army points of contact and subject matter experts. You can reach the outreach office staff at 859-626-8944 or via email at [outreach@bechtel.com](mailto:outreach@bechtel.com). You also are invited to visit the office at 301 Highland Park Drive, in Richmond. The office is open weekdays from 8 a.m. to 5 p.m. Additional office hours are available upon request.

**FOR MORE INFORMATION CONTACT:** Additional information on chemical stockpile disposal is available at the Blue Grass Chemical Stockpile Outreach Office, 301 Highland Park Drive, Richmond, KY 40475. Telephone: 859-626-8944. Email address: [outreach@bechtel.com](mailto:outreach@bechtel.com). For additional information, please contact the Blue Grass Army Depot Public Affairs Officer at 859-625-6221 or the Blue Grass Chemical Activity Public Affairs Officer at 859-625-6897.